



PTO/SB/30 (09-03)

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**Request  
for  
Continued Examination (RCE)  
Transmittal**Address to:  
Mail Stop RCE  
Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Application Number	10/618,462
Filing Date	07/11/2003
First Named Inventor	Guangming Yin
Art Unit	2817
Examiner Name	Nguyen, Patricia T.
Attorney Docket Number	BP1817CON1

**This is a Request for Continued Examination (RCE) under 37 CFR 1.114 of the above-identified application.**

Request for Continued Examination (RCE) practice under 37 CFR 1.114 does not apply to any utility or plant application filed prior to June 8, 1995, or to any design application. See Instruction Sheet for RCEs (not to be submitted to the USPTO) on page 2.

1. **Submission required under 37 CFR 1.114** Note: If the RCE is proper, any previously filed unentered amendments and amendments enclosed with the RCE will be entered in the order in which they were filed unless applicant instructs otherwise. If applicant does not wish to have any previously filed unentered amendment(s) entered, applicant must request non-entry of such amendment(s).

a. ☐ Previously submitted. If a final Office action is outstanding, any amendments filed after the final Office action may be considered as a submission even if this box is not checked.

i. ☐ Consider the arguments in the Appeal Brief or Rely Brief previously filed on \_\_\_\_\_

ii. ☐ Other \_\_\_\_\_

b. ☒ Enclosed (forms PTO/SB/08A and PTO/SB/08B are submitted herewith)

i. ☐ Amendment/Reply

iii. ☒ Information Disclosure Statement (IDS)

ii. ☐ Affidavit(s)/ Declaration(s)

iv. ☐ Other \_\_\_\_\_

**2. Miscellaneous**

a. ☐ Suspension of action on the above-identified application is requested under 37 CFR 1.103(c) for a period of \_\_\_\_\_ months. (Period of suspension shall not exceed 3 months; Fee under 37 CFR 1.17(i) required)

b. ☐ Other \_\_\_\_\_

**3. Fees**

The RCE fee under 37 CFR 1.17(e) is required by 37 CFR 1.114 when the RCE is filed.

The Director is hereby authorized to charge the following fees, or credit any overpayments, to

a. ☐ Deposit Account No. \_\_\_\_\_

i. ☐ RCE fee required under 37 CFR 1.17(e)

ii. ☐ Extension of time fee (37 CFR 1.136 and 1.17)

iii. ☐ Other \_\_\_\_\_

b. ☐ Check in the amount of \$ \_\_\_\_\_ enclosed

c. ☒ Payment by credit card (Form PTO-2038 enclosed)

**WARNING: Information on this form may become public. Credit card information should not be included on this form. Provide credit card information and authorization on PTO-2038.****SIGNATURE OF APPLICANT, ATTORNEY, OR AGENT REQUIRED**

Name (Print/Type)	Shayne X. Short, Ph.D. (Reg. No. 45,105)	Registration No. (Attorney/Agent)	45,105
Signature		Date	08/12/2004

**CERTIFICATE OF MAILING OR TRANSMISSION**

I hereby certify that this correspondence is being deposited with the United States Postal Service with sufficient postage as first class mail in an envelope addressed to: Mail Stop RCE, Commissioner for Patents, P. O. Box 1450, Alexandria, VA 22313-1450 or facsimile transmitted to the U.S. Patent and Trademark Office on the date shown below.

Name (Print/Type)	Janice Ivy		
Signature		Date	08/12/2004

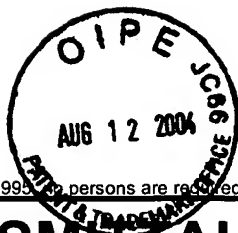
This collection of information is required by 37 CFR 1.114. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Mail Stop RCE, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

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08/16/2004 EFLORES 00000025 10618462

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770.00 OP



PTO/SB/17 (10-03)  
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# FEE TRANSMITTAL for FY 2004

Effective 10/01/2003. Patent fees are subject to annual revision.

☐ Applicant claims small entity status. See 37 CFR 1.27

TOTAL AMOUNT OF PAYMENT (\$)**770.00**

## Complete if Known

Application Number	10/618,462
Filing Date	07/11/2003
First Named Inventor	Guangming Yin
Examiner Name	Nguyen, Patricia T.
Art Unit	2817
Attorney Docket No.	BP1817CON1

## METHOD OF PAYMENT (check all that apply)

☐ Check ☒ Credit card ☐ Money Order ☐ Other ☐ None

☐ Deposit Account:

Deposit Account Number: 50-2126  
Deposit Account Name: Garlick Harrison & Markison LLP

The Director is authorized to: (check all that apply)

☐ Charge fee(s) indicated below ☐ Credit any overpayments

☒ Charge any additional fee(s) or any underpayment of fee(s)

☐ Charge fee(s) indicated below, except for the filing fee to the above-identified deposit account.

## FEE CALCULATION

### 1. BASIC FILING FEE

Large Entity		Small Entity		Fee Description	Fee Paid
Fee Code	Fee (\$)	Fee Code	Fee (\$)		
1001	770	2001	385	Utility filing fee	
1002	340	2002	170	Design filing fee	
1003	530	2003	265	Plant filing fee	
1004	770	2004	385	Reissue filing fee	
1005	160	2005	80	Provisional filing fee	
SUBTOTAL (1)					(\$) <b>0</b>

### 2. EXTRA CLAIM FEES FOR UTILITY AND REISSUE

Total Claims  -20\*\* =  X  =   
Independent Claims  -3\*\* =  X  =   
Multiple Dependent  =

Large Entity		Small Entity		Fee Description	Fee Paid
Fee Code	Fee (\$)	Fee Code	Fee (\$)		
1202	18	2202	9	Claims in excess of 20	
1201	86	2201	43	Independent claims in excess of 3	
1203	290	2203	145	Multiple dependent claim, if not paid	
1204	86	2204	43	** Reissue independent claims over original patent	
1205	18	2205	9	** Reissue claims in excess of 20 and over original patent	
SUBTOTAL (2)					(\$) <b>0</b>

\*\*or number previously paid, if greater; For Reissues, see above

## FEE CALCULATION (continued)

### 3. ADDITIONAL FEES

Large Entity Small Entity

Fee Code	Fee (\$)	Fee Code	Fee (\$)	Fee Description	Fee Paid
1051	130	2051	65	Surcharge - late filing fee or oath	
1052	50	2052	25	Surcharge - late provisional filing fee or cover sheet	
1053	130	1053	130	Non-English specification	
1812	2,520	1812	2,520	For filing a request for ex parte reexamination	
1804	920*	1804	920*	Requesting publication of SIR prior to Examiner action	
1805	1,840*	1805	1,840*	Requesting publication of SIR after Examiner action	
1251	110	2251	55	Extension for reply within first month	
1252	420	2252	210	Extension for reply within second month	
1253	950	2253	475	Extension for reply within third month	
1254	1,480	2254	740	Extension for reply within fourth month	
1255	2,010	2255	1,005	Extension for reply within fifth month	
1401	330	2401	165	Notice of Appeal	
1402	330	2402	165	Filing a brief in support of an appeal	
1403	290	2403	145	Request for oral hearing	
1451	1,510	1451	1,510	Petition to institute a public use proceeding	
1452	110	2452	55	Petition to revive - unavoidable	
1453	1,330	2453	665	Petition to revive - unintentional	
1501	1,330	2501	665	Utility issue fee (or reissue)	
1502	480	2502	240	Design issue fee	
1503	640	2503	320	Plant issue fee	
1460	130	1460	130	Petitions to the Commissioner	
1807	50	1807	50	Processing fee under 37 CFR 1.17(q)	
1806	180	1806	180	Submission of Information Disclosure Stmt	
8021	40	8021	40	Recording each patent assignment per property (times number of properties)	
1809	770	2809	385	Filing a submission after final rejection (37 CFR 1.129(a))	
1810	770	2810	385	For each additional invention to be examined (37 CFR 1.129(b))	
1801	770	2801	385	Request for Continued Examination (RCE)	770
1802	900	1802	900	Request for expedited examination of a design application	

Other fee (specify) \_\_\_\_\_

\*Reduced by Basic Filing Fee Paid

SUBTOTAL (3) (\$)**770**

## SUBMITTED BY

Name (Print/Type)	Shayne X. Short, Ph.D.	Registration No. (Attorney/Agent)	45,105	Telephone	(512) 825-1145
Signature		Date	08/12/2004		

**WARNING: Information on this form may become public. Credit card information should not be included on this form. Provide credit card information and authorization on PTO-2038.**

This collection of information is required by 37 CFR 1.17 and 1.27. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS.  
**SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.**

If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.



**PATENT APPLICATION  
IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

**Inventor(s):** Guangming Yin and Jun Cao

**Application Serial No:** 10/618,462

**Application Filing Date:** 07/11/2003

**Patent No:** n/a

**Patent Issue Date:** n/a

**Title:** Current-controlled CMOS wideband data amplifier circuits

**Examiner:** Nguyen, Patricia T.

**Art Group:** 2817

**Confirmation No:** 3869

**Attorney Docket No:** BP1817CON1

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Date: Thursday, August 12, 2004 (08/12/2004)

M.S. RCE

Commissioner for Patents

P.O. Box 1450

Alexandria, VA 22313-1450

Dear Sir or Madam:

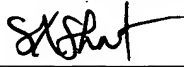
The Applicant is also submitting herewith an RCE (Request for Continued Examination) and hereby requests independent consideration by the Examiner of the references cited herewith via IDS (Information Disclosure Statement).

The references being presented by the Applicant herein have been cited by opposing counsel in ongoing litigation related to U.S. utility patent application serial No. 09/484,856, (Attorney Docket No. BP1645), filed January 18, 2000 (01/18/2000), now U.S. patent no. 6,414,194 B1. The above-referenced ongoing litigation is: Agere Systems, Inc. vs. Broadcom Corporation, Civil Action 03-3138, Hon. Berle M. Schiller, In the United States District Court for the Eastern District of Pennsylvania.

The Applicant is submitting herewith the RCE and associated fee and IDS forms (PTO/SB/08A, 1 sheet and PTO/SB/08B, 3 sheets) citing the references to be considered by the Examiner.

The Examiner is invited to contact the undersigned by telephone or facsimile if the Examiner believes that such a communication would advance the prosecution of the present patent application, or if the Examiner has any additional questions or concerns.

RESPECTFULLY SUBMITTED,

By: 

Shayne X. Short, Ph.D.

Reg. No. 45,105

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## Invalidity References Asserted Against '194

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2.	Mizuno, <i>A GHz MOS Adaptive Pipeline Technique Using MOS Current-Mode Logic</i> , IEEE Journal of Solid-State Circuits, vol.6, pp.784-791 (June 1996).
3.	Klose, <i>Process-Optimization for Sub-30ps BiCMOS Technologies for Mixed ECL/CMOS Applications</i> , IEEE 1991.
4.	Heimsch, <i>Merged CMOS/Bipolar Current Switch Logic (MCSL)</i> , IEEE Journal of Solid-State Circuits, vol.24, pp.1307-11 (October 1989).
5.	Elrabaa, <i>Optimization of Digital BiCMOS Circuit, An Overview</i> , IEEE 1992.
6.	Elrabaa, <i>Multimixer BiCMOS CML Circuits</i> , IEEE Journal of Solid-State Circuits, vol.27, pp. 454-458 (March 1992).
7.	Ewen et al., <i>Single-Chip 1062Mbaud CMOS Transceiver for Serial Data Communication</i> , 1995 IEEE International Solid-State Circuits Conference Digest of Technical Papers, pp. 32-33, 336.
8.	Chen and Waldron, <i>A Single-Chip 266Mb/s CMOS Transmitter/Receiver for Serial Data Communications</i> , 1993 IEEE International Solid-State Circuits Conference Digest of Technical Papers, pp100-01, 269.
9.	Oshima et al., <i>A Single CMOS SDH Terminal Chip for 622 Mb/s STM-4C</i> , 1994 IEEE International Solid-State Circuits Conference Digest of Technical Papers, pp. 174-75.
10.	Widmer et al., <i>Single-Chip 4x500Mbaud CMOS Transceiver</i> , 1996 IEEE International Solid-State Circuits Conference Digest of Technical Papers, pp.126-27, 430.
11.	Lee et al., <i>A CMOS Serial Link for 1 Gbaud Fully Duplexed Data Communication</i> , 1994 Symposium on VLSI Circuits Digest of Technical Papers, pp.125-26.
12.	Lee et al., <i>A CMOS Serial Link for Fully Duplexed Data Communication</i> , IEEE Journal of Solid-State Circuits, vol.30, pp.353-364 (April 1995).

Further references from Agere's 3rd Supplemental Response to Interrogatory No. 6

TAB	REFERENCE
13.	U.S. Patent No. 5,345,449 to Buckingham et al.,
14.	U.S. Patent No. 5,420,529 to Guay et al.,
15.	U.S. Patent No. 5,675,584 to Jeong,
16.	U.S. Patent No. 5,724,361 to Fiedler,
17.	U.S. Patent No. 5,767,699 to Bosnyak et al.,
18.	U.S. Patent No. 5,798,658 to Werking,
19.	U.S. Patent No. 6,038,254 to Ferraiolo,
20.	U.S. Patent No. 6,061,747 to Ducaroir et al.,
21.	U.S. Patent No. 6,094,074 to Chi et al.,
22.	U.S. Patent No. 6,188,339 B1 to Hasegawa,
23.	U.S. Patent No. 6,194,950 B1 to Kibar et al.,
24.	U.S. Patent No. 6,222,380 B1 to Gerowitz et al.,
25.	U.S. Patent No. 6,265,898 B1 to Bellaouar,
26.	U.S. Patent No. 6,463,092 B1 to Kim et al.;
27.	Djahanshahi et al., High-speed ECL-Compatible Serial I/O in 0.35 $\mu$ m CMOS, IEEE 1998;
28.	Fukaishi et al., A 4.25-Gb/s CMOS Fiber Channel Transceiver with Asynchronous Tree-Type Demultiplexer and Frequency Conversion Architecture, IEEE Journal of Solid-state Circuits, Vol. 33 No. 12 pp. 2139-47 (1998);
29.	Madhavan and Levi, Low-Power 2.5 Gbit/s VCSEL driver in 0.5 $\mu$ m CMOS technology, Electronics Letters, Vol. 34 No. 2 pp. 178-79 (1998);
30.	Chen and Baker, A 1.25Gb/s, 460mW CMOS Transceiver for Serial Data Communication, 1997 IEEE International Solid-state Circuits Conference pp. 242-43,465;
31.	Runge and Thomas, 5Gbit/s 2:1 multiplexer fabricated in 0.35 $\mu$ m CMOS and 3Gbit/s 1:2 demultiplexer fabricated in 0.5 $\mu$ m CMOS technology, Electronics Letters, Vol. 35 No. 19 pp. 1631-33 (1999);
32.	Fiedler et al., A 1.0625Gbps Transceiver with 2x-Oversampling and Transmit Signal Pre-Emphasis, 1997 IEEE International Solid-state Circuits Conference pp. 238-39, 464;
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34.	Kurisu et al., 2.8Gb/s 176mW Byte-Interleaved and 3.0 Gb/s 118mW Bit-Interleaved 8:1 Multiplexers, 1996 International Solid-state Circuits Conference pp. 122-23, 429;
35.	Friedman et al, A Baseband Processor for IS-54 Cellular Telephony, IEEE Journal of Solid-state Circuits, Vol. 31 No. 5 pp.646-55 (1996);

36.	Ewen et al., CMOS circuits for Gb/s serial data communication, IBM J. Res. Develop., Vol. 39 No. 1/2 pp. 73-81 (1995);
37.	Thompson et al., A 300-MHz BiCMOS Serial Data Transceiver, IEEE Journal of Solid-state Circuits, Vol. 29 No. 3 pp. 185-92 (1994);
38.	Yuen et al., An ECL Gate Array with 2.5 GHz Embedded PLL, IEEE 1993;
39.	Quigley et al., Current Mode Transceiver Logic, (CMTL) for Reduced Swing CMOS, Chip to Chip Communication, IEEE 1993;
40.	Dunlop et al., A 9 Gbit/s Bandwidth Multiplexer/Demultiplexer CMOS Chip, 1992 Symposium on VLSI Circuits Digest of Technical Papers pp. 68-69;
41.	Navarro and Van Noije, Design of an 8:1 MUX at 1.7Gbit/s in 0.8um CMOS Technology, 1998 Great Lakes Symposium on VLSI;
42.	Pederson and Metz, A CMOS to 100K ECL Interface Circuit, 1989 IEEE International Solid-state Circuits Conference pp. 226-27, 345;
43.	Baumert et al., A Monolithic 50-200 MHz CMOS Clock Recovery and Retiming Circuit, IEEE 1989 Custom Integrated Circuits Conference pp. 14.5.1-14.5.4.